

CLAIMS

What is claimed is:

1 1. A pivotal joystick base comprising:
2 a base bar having a pivot end and a base end;
3 the pivot end being pivotal horizontally on a base pivot that is affixed
4 to a chair attachment;
5 the chair attachment being articulated for attachment to a motorized
6 chair predeterminedly;
7 the base end being adapted to support a joystick assembly
8 predeterminedly; and
9 the base pivot having a pivot lock for locking the base bar in a pivoted
10 position selectively.

1 2. The pivotal joystick base of claim 1 wherein:
2 the base pivot includes a pivot axle that is oriented vertically on the
3 chair attachment for horizontal pivoting of the base bar; and
4 the pivot lock includes a spring-pressured member that is spring-
5 pressured upwards vertically into contact with an underside of the base bar and into
6 at least one positional recess in the underside of the base bar for soft-locking the
7 spring-pressured member in the positional recess at a pivotal position of the base bar
8 predeterminedly.

1 3. The pivotal joystick base of claim 2 wherein:
2 the spring-pressured member is spring-pressured upwards vertically
3 with a spring having spring pressure variable with an adjustment bolt having an axis
4 that is collinear to an axis of the spring-pressured member for entrance of the
5 spring-pressured member into the positional recess.

1 4. The pivotal joystick base of claim 3 wherein:
2 the spring-pressured member is spherical and positioned in a top portion
3 of a lock cylinder in which a helical spring is positioned vertically below the spring-
4 pressured member and the adjustment bolt is threaded into a bottom portion of the
5 lock cylinder for adjusting tension of the helical spring against the spring-pressured
6 member selectively.

1 5. The pivotal joystick base of claim 1 wherein:
2 the base pivot includes the lock-notch surface on the chair attachment
3 for horizontal pivoting of the base bar on the pivot axle vertically above the lock-
4 notch surface;
5 the lock-notch surface includes a predetermined plurality of lock
6 notches positioned predeterminedly circumferential at a design notch distance
7 radially from the pivot axle;
8 the pivot lock includes a latch that is moveable upwardly and
9 downwardly in a latch aperture in the base rod at the notch distance from the pivot
10 axle;

11 that latch includes a latch tip that is positioned in a select one of the lock
12 notches for locking the base bar in a selected pivotal direction from the pivot axle;
13 the latch tip is removed from any of the lock notches for pivoting the
14 base bar to a selected pivotal direction from the pivot axle; and
15 the lock notches are articulated to receive the latch predeterminedly.

1 6. The pivotal joystick base of claim 5 wherein:
2 the latch includes a latch actuator in a bar knob that is affixable to a
3 topside of the pivot end of the base bar.

1 7. The pivotal joystick base of claim 6 wherein:
2 that latch actuator includes internal fastener threads in the bar knob and
3 matching external threads in an actuator portion of the latch; and
4 the latch includes a latch handle for rotating the latch in a downward-
5 rotational direction to screw the latch tip into a select one of the lock notches and for
6 rotating the latch in an upward-rotational direction to unscrew the latch tip from any
7 one of the lock notches.

1 8. The pivotal joystick base of claim 7 wherein:
2 the latch handle includes a latch knob.

1 **9.** The pivotal joystick base of claim 8 wherein:
2 the latch tip is conical; and
3 the lock notches are matched conically concave for receiving the latch
4 tip.

1 **10.** The pivotal joystick base of claim 5 wherein:
2 the latch tip is conical; and
3 the lock notches are matched conically concave for receiving the latch
4 tip.

1 **11.** The pivotal joystick base of claim 1 wherein:
2 the base bar includes a fastener aperture through which an assembly
3 fastener is inserted and tightened to position the joystick assembly on the base rod.

1 **12.** The pivotal joystick base of claim 11 wherein:
2 the joystick assembly is rotational on the assembly fastener for
3 positioning the joystick assembly in a desired rotational direction for joystick control
4 of the motorized chair with the base bar being pivoted to a select pivotal position.

1 **13.** The pivotal joystick base of claim 12 wherein:
2 the fastener aperture includes a slot predeterminedly intermediate the
3 latch end and the pivot end of the base bar for positioning the joystick assembly
4 linearly along the base bar selectively.

1 **14.** The pivotal joystick base of claim 13 wherein:
2 the assembly fastener includes an assembly knob for hand-rotating the
3 assembly fastener.

1 **15.** The pivotal joystick base of claim 1 wherein:
2 the chair attachment includes an attachment bar that is extended from
3 proximate the base pivot for attachment to the motorized chair predeterminedly.

1 **16.** The pivotal joystick base of claim 9 wherein:
2 the chair attachment includes an attachment bar that is extended from
3 proximate the base pivot for attachment to the motorized chair predeterminedly.

1 **17.** The pivotal joystick base of claim 1 wherein:
2 the chair attachment includes an attachment plate proximate the base
3 pivot; and
4 the attachment plate includes at least one fastener orifice for attachment
5 to the motorized chair with fasteners predeterminedly.

1 **18.** The pivotal joystick base of claim 9 wherein:
2 the chair attachment includes an attachment plate proximate the base
3 pivot; and
4 the attachment plate includes at least one fastener orifice for attachment
5 to the motorized chair with fasteners predeterminedly.

1 19. The pivotal joystick base of claim 1 and further comprising:
2 a stop on a bottom side of the base bar for contacting the chair
3 attachment to prevent inward pivoting of the base bar to a position of contact of the
4 base end with a front portion of a user.

1 20. The pivotal joystick base of claim 18 wherein:
2 the latch knob is a flush knob that is recessed in a knob bay in the bar
3 knob.

1 21. The pivotal joystick base of claim 9 wherein:
2 the latch includes a resilient section that is affixed to the latch at
3 oppositely disposed ends of the resilient section for inserting the latch tip into and
4 removing it from the latch notch selectively.

INVENTOR


JOHN R. COWEN

Date: 5-30-02